Regulatory Update
Federal Railroad Administration

Special Permits

Review of Special Permit Application Process

PHMSA is proposing to revise its procedures for applying for a special permit in HM233B.
There four types of SP requests; new, renewal, modification, and party status. Each requires a unique review protocol within the FRA. We have developed the general protocol as is outlined below. Each type of SP application will require some or all of these steps in the evaluation.

- Current DOT HM registration and AAR Registration/Certification
- Complete special permit application
- General (rail, portable tank, cargo tank, etc.) shipping history
- Compliance history (inspection records)
- Fitness review in the form of a audit/inspection by FRA Region personnel
- Demonstrate equivalent level of safety or consistency with public interest in the absence of a standard.

Review of Current Special Permits

The FRA is reviewing Special Permits that are exclusive to the railroad transport of hazardous materials. The focus criteria will be as follows.

- Is the Special Permit still needed?
  If not needed, the FRA will recommend to PHMSA request a "Show Cause" letter to explain the need for the special permit.
- Is the Special Permit issued to a corporation, but specific to a particular location?
  If so, the FRA will recommend to PHMSA request a "Show Cause" letter to explain why all location should be included in the special permit.
- Is the permit holder "fit" to perform duties associated with the Special Permit.
- Determine which Special Permit(s) can be incorporated into the regulations.

> As proposed **HM233A** incorporates 11761 and a number of existing special permits related to GWR greater than 263,000 lbs into the regulations. This NPRM potentially eliminates 23 special permits with 102 parties to those permits. HM233A allows for 286,000 GWR with the stipulation the car design must meet the requirements of S-286 and the car owner must obtain approval from the FRA. As an explanation of the second requirements, we offer the following. HM246 allows for a 286,000 GWR for tank cars used to transport PIH commodities with the caveat that 100% of weight increase be safety improvements. S-286 allows for 286,000 GWR as long as the design requirements of that statue are met. These include increasing design loads, where not specified for 286,000 lb GWR, and specification standards for brake systems, bearings, axles, wheels, draft systems and trucks. However, these requirements do necessarily provide the level of safety required for the variety of chemicals in the Hazardous Materials Table transported by rail. As such, the FRA is proposing to prepare a Guidance Document that will delineate the design requirements for families of chemicals. The requirements will lie somewhere between those of S-286 and HM-246.

Special Permit requests currently under review

The FRA is currently reviewing requests for Special Permits that if granted would allow for significantly different features on tank cars.

One Time Movement Approvals

What is a One Time Movement Approval (OTMA) and when is it needed?
49CFR174.50 indicates a tank car that does not conform to the requirements that subchapter (§174) may not be forwarded by rail unless repaired or approved for movement by the Associate Administrator for Safety, FRA.

The owner, shipper or entity currently in possession of a non-conforming car must complete and submit a OTMA application (www.**fra**.dot.gov/Downloads/Safety/**approvalform**05.pdf) to a Hazardous Materials Specialist at FRA Headquarters in Washington, DC. If the information provided on the application is adequate an OTMA will be issued. In instances where the tank or structural integrity of the tank car is in question the OTMA application will be sent for engineering analysis. In this case the information in, but not limited to, the following list may be requested.

- AAR 4-2 Certificate of Construction
- AAR R-1 Report of Tank Car Repairs, Alterations, and Conversions (related to the area where the defect was found)
- AAR R-2 Report of Non-Accident related Buckles, Corrosion, and Crack Repairs (related to the area where the defect was found)
- AAR SS-3 Report of Tank Car Stub Sill Inspection
- Detailed drawing(s) with arrows identifying the defect location
- Photograph(s) to provide perspective of location of the defect on the car.
- Detailed photograph(s) of the defect

The OTMA may contain operational restrictions and other instructions for pre- and post-repair of the tank car. In many cases there will be a requirement for a root cause analysis follow-up report with the findings of an investigation into the cause of the defect. That request will include instructions on submitting findings to the FRA.

It is evident from the information in the table below that the understanding of the requirement for OTMAs is spreading across the industry. The number of OTMAs nearly doubled between 2004 and the end of 2009. Indeed, at the current rate, we expect to receive between 800 and 900 OTMA requests in 2010.

Year	*OTMA*
2004	333
2005	333
2006	354
2007	380
2008	444
2009	613

Of the OTMAs issued between 2004 and today, there is an 8% response rate to the requirement for a root cause analysis. FRA has initiated an effort in which the root cause analyses are scrutinized by the engineering staff. If the analyses are found to be inadequate the grantee of the OTMA will be contacted and additional information requested. The response rate will be closely monitored and the grantees held accountable. The letters are expected to be submitted within the required time frame. If the time requirements cannot be met the grantee should request a reasonable extension. If follow-up letters are not received the Specialist will deny future requests for OTMAs.

Inspection Philosophy

The FRA and BOE oversight of the tank car industry has not achieved the anticipated results. While there has been notable decrease in the number of NARs in 2009, prior to that NARs had “flat-lined” since 2004. The FRA is concerned the current approach does not effectively identify and ultimately lead to correction of the root cause of problems at tank car facilities. The new approach will be based on analyses of NAR, OTMA and inspection data. The FRA will identify areas of concern specific to different

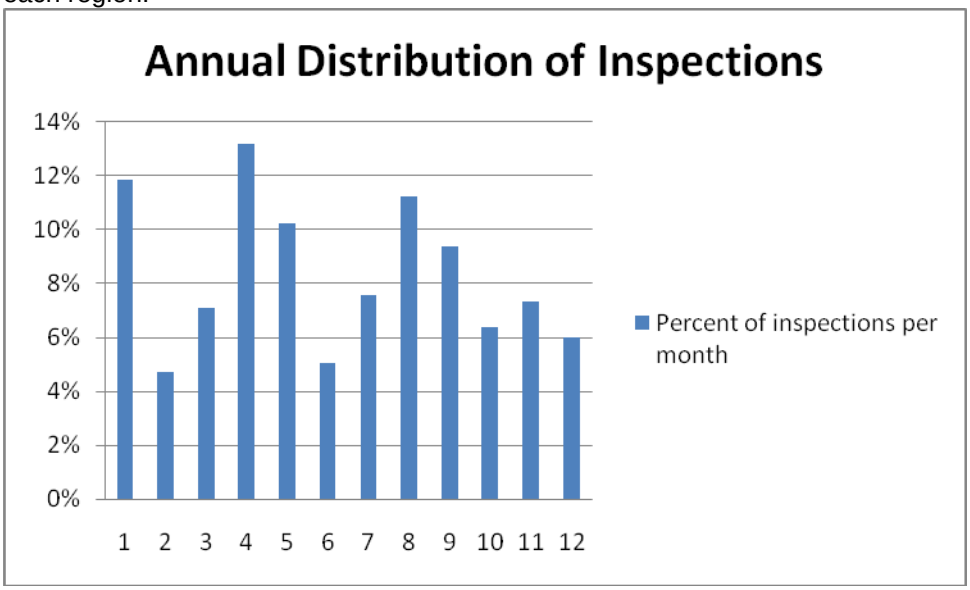
segments of the industry. Any one or a couple of these identified areas will be the focus of an inspection effort at a particular facility. This approach is in direct contrast to the current approach of auditing/inspecting against all 23 AAR elements covering all phases of a particular facility. The current intensive inspection effort coupled with limited FRA resources has resulted in limited coverage of tank car facilities. Over the last three years approximately a third of the tank car facilities have been inspected by FRA personnel. The new approach will permit a more efficient use of resources, greater coverage of tank car facilities and, of greatest importance, lead to improvement in the overall quality of the inspection, maintenance, and repair of tank cars.

Tank Car Coupling Speed Audit

The Coupling Speed Audit Project started in April of 2006 and will continue until October 2010. As of March 30, 1,564 readings have been obtained. The average speed 5.68 mph with 2.0 cars in the cut. The distribution of loaded to empty car readings is roughly 50/50. Readings have been taken in 81 yards in 24 states and every FRA region. The average number of readings in each year is 20 with a range of 1 to 178 readings.

Some additional data is provided below to lend perspective of FRA's audit effort to date.

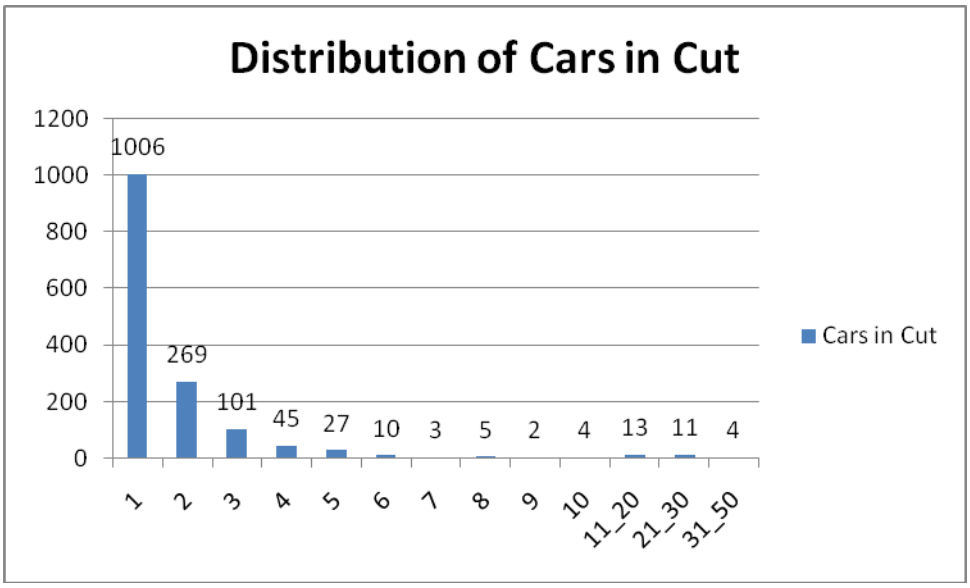
Coupling speed readings have been taken throughout the year. The data indicates the dates of the audits are reasonably well distributed and representative of the variation of annual weather conditions in each region.

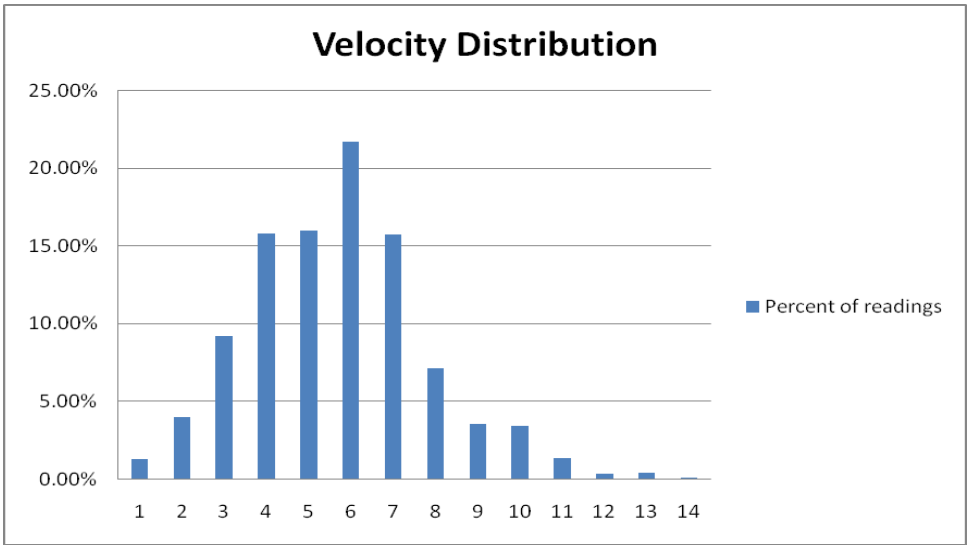


Audits were performed at both flat and hump yards with approximately twice as many readings taken in hump yards.

Description of Yard	*Percent of Total Inspection*
Flat	25
Flat/RCL	8
Hump	43
Hump/RCL	20
RCL	5

The primary emphasis of the audit is measure the speed of the cars being coupled as well as the number of cars in each cut.





Behavior of Tank Cars in Accident Project

FRA has met with the Security and Emergency Response Training Center (SERTC) at TTC in Pueblo, CO to discuss the Damage Assessment and Causal Factor Evaluations Course. FRA is currently evaluating the SERTC proposal. A basic outline of the course is provided below.

Day 1 – Mechanics/Metallurgy/Accident Dynamics
Day 2 – Data review
Day 3 – NIMS/Collection methods
Day 4 – Practical exercise

The initial course will be given to a select group of FRA inspector that will comprise our response team. Subsequent courses for industry can be arranged through SERTC.

During the preparation of the course SERTC will deliver update course material. We would like to assemble a team to review the material to ensure proper and useful data will be collected. The team will be comprised of a cross-section of the industry.

Personnel

Two Quality Assurance Inspector positions have recently been filled. Randy Keltz started in March and will be based in Region 2. Sam Ryder, previously an Inspector in Region 4, will be based in Region 5. An additional Quality Assurance Inspector position has been posted in Region 3.